UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,117	09/11/2003	Serap Ayse Savari	3	6834

7590   04/05/2005

Ryan, Mason & Lewis, LLP
Suite 205
1300 Post Road
Fairfield, CT 06824

EXAMINER
JEAN PIERRE, PEGUY

ART UNIT	PAPER NUMBER
2819	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/660,117	SAVARI, SERAP AYSE
	Examiner	Art Unit	
	Peguy JeanPierre	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 February 2005*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-10,13-15,17 and 18* is/are rejected.

7)☒ Claim(s) *5,6,11,12,16, 19 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed on 2/18/2005 have been fully considered but they are not persuasive. Applicant argues that Babu discloses "a method for generating a data model for compressing a data table". The Examiner agrees. However, the model is generated from the input string. The table as set forth in the rejection is compressed row-wise and each row represent the input string. The reference clearly teaches that the table is viewed as a large byte string (paragraph 5) and that popular compression programs such as gzip employ the Lempel Zip algorithm that treats the input data as a byte string and performs lossless compression on the input (see paragraph 5).

Applicant also argues that "the utilization of the lexicographic normal form in the present invention implies that a model for the data already exists and has been selected." There is no suggestion in the claim to support this assertion. Foe instance claim 1 does not recityes the existence of a model nor the selection of an existing model to use the lexicographic normal form. The claim recites the steps of generating a lexicographic normal form from an input string and applying a compression scheme to the lexicographic normal form (see rejection above). Such recitation can be clearly found in Babu (see rejection above). Moreover, Babu recites the use of a single pass over the input string (see paragraphs 122, 135).

Yang teaches a grammar based lossless compression scheme based for ordered/ sorted data. The lexicographic or Foata forms are ordered set of data. Hence, the use of such compression scheme can be used to compress these forms.

It is to be noted that what a reference can be said to fairly suggest relates to the

concepts fairly contained therein, and is not limited to the specific structure chosen to

illustrate such concepts anymore than combining the teachings can be said to be limited

by the artisan's ability to combine specifically disclosed reference structures.(see In re

Nievelt, 482 F.2d 179 USPQ 224 (CCPA 1973). Obviousness can only be established

by combining or modifying the teachings of the prior art to produce the claimed

invention where there is some teaching, suggestion, or motivation to do so found either

in the references themselves or in the knowledge generally available to one of ordinary

skill in the art.

Both references were available by the time the invention was made, Hence the

combination of reference is proper.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-4, 7-10, 13-15, 17-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Babu et al. (US 20030130855) in view of Yang et al. (USP

6,801,141).

Babu et al. disclose in Figure 1 a compression system that comprises a compression

table that is compressed row-wise where each row represents the input string (154

page 12). The compression method uses only a single pass over a sorted (ordered) list of the input string and further employs a Lempel-Ziv compression method to compress the data (122 page 10; 135 page 11). Babu et al. fail to teach a grammar based lossless data compression scheme; that the input string is one or more program instructions or events in a communication network.

Yang et al. disclose a lossless data compression system using context dependent grammar based algorithm. The algorithm of Yang et al. comprises programming instructions suitable in communication network by achieving online compression of web-based data to recover the original input string incrementally. Therefore, it would have been obvious to one having ordinary skill in the art to implement in the system of Babu et al. the grammar based compression scheme as taught by Tang et al. to efficiently transform an input sequence associated with specific context into an irreducible context dependent grammar and orderly recover the input sequence in critical applications such as text files, web pages etc... and facilitate interchange between the data or events. Though Babu et al. do not disclose a lexicographic or Foata normal form, it is to be noted that both forms call for ordering/sorting the input string. Hence, they both can be processed in the compression scheme of Babu et al. because of these identical features. It is also be noted that the sorting/ordering of the input string requires the use of a memory to read, write, process the input string as desired.

Allowable Subject Matter

4.   Claims 5-6, 11-12, 16 and 19-20 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all

of the limitations of the base claim and any intervening claims.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Peguy JeanPierre whose telephone number is (571)

272-1803. The examiner fax phone number is (571) 273-1803.

Peguy JeanPierre
Primary Examiner